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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,750	01/16/2002	Wai William Wang	39524.1000	7722
20322	7590	04/21/2006	EXAMINER	
SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/050,750	<b>Applicant(s)</b> WANG ET AL.	
	<b>Examiner</b> Gautam R. Patel	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-5 and 7-8 are pending for the examination. Claim 8 is newly added.

### **NOTES/REMARKS**

2. An attempt was made to reach the attorney on 4/12/06 to clarify few points. No response was received.

### **Claim Rejections - 35 U.S.C. § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kuroda, et al., US. Patent 5,818,807 (hereafter Kuroda).

As to claim 1, Kuroda discloses the invention as claimed, an optical power calibration method [see Figs. 1-6, especially 1] including providing data to be written, determining a writing location of the data, and performing an optical power calibration process, comprising the steps of:

Setting a second power calibration area [fig. 1a, area marked PA under CHAPTER 1] is close to an outer edge of the storage carrier where in a starting point of the second power calibration area is outside compared to a starting point of the last possible lead-out area [LO];

providing data to be written on the data storage area [col. 3, line 46 to col. 4, line 20];

before writing that data in the data storage area, determining a writing location [fig. 1a location "DATA" in CHAPTER 1 and "DATA" in CHAPTER 2] of the data in the data storage area [col. 3, line 46 to col. 4, line 20];

depending on the determined writing condition in the data storage area, performing an optical power calibration process either, in the first power calibration area [fig. 1a, area marked PCA] when the writing condition being within a predetermined condition or in the second power calibration area when the writing condition being out of the predetermined condition to determine a calibrated writing power; and

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controlling the access device to write the data with the calibrating writing power [col. 3, line 46 to col. 4, line 20].

4. The aforementioned claim 2, recites the following steps, inter alia, disclosed in Kuroda: data storage area is divided into an inner area [fig. 1a, area marked 'DATA' in CHAPTER 1] and an outer area [fig. 1a, area marked 'DATA' in CHAPTER 2], and the predetermined portion is the inner area, when the writing location is located within the inner area, performing the optical power calibration process in the first power calibration area [fig. 1a, PCA], and when the writing location is located in the outer area, performing the optical power calibration process in the second power calibration area [fig. 1a area marked PA under CHAPTER 1] [col. 3, line 46 to col. 4, line 20].

5. The aforementioned claim 8, recites the following steps, inter alia, disclosed in Kuroda: Writing condition comprises a writing location of the data in the data storage area, and the predetermined condition comprises a predetermined portion of the data storage area [col. 3, line 46 to col. 4, line 20].

### **Claim Rejections - 35 U.S.C. § 103**

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuroda as applied to claims 1-2 above in view of Suga et al., US. patent 6,418,102 (hereafter Suga).

As to claim 3, Kuroda discloses all of the above elements, including two power calibration locations and last possible lead-out area. Kuroda does not specifically disclose that the speed can be controlled in CAV and CLV [linear velocity] manner to the extent claimed.

However, controlling speed in CAV and CLV manner has been known in the art for a very long time. Also Suga clearly discloses:

the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner [Fig. 6B and col. 8, line 53 to col. 9, line 20].

Both Kuroda and Suga are interested in improving the laser power calibration method in an optical disk device. Both show different area for power calibration which are separate from data area.

One of ordinary skill in the art at the time of invention would have realized that in recent years, there has been a clear trend for a faster transmission than the standard transmission rate with respect not only to playback of an optical disk but also to recording and faster more accurate recording will be a good feature to have in the system of Kuroda.

Therefore, it would have been obvious to have also used a CAV & CLV manner of speed control in the system of Kuroda as taught by Suga because one would be motivated to record data at both the CAV & CLV manner of speed control and make system faster and more accurate for discs that are formatted differently from each other, thus increasing the versatility of system [col. 1, lines 58-63 and col. 2, lines 4-12; Suga].

7. The aforementioned claim 4, recites the following steps, inter alia, disclosed in Suga:

the carrier player controls rotation of the optical storage carrier in a constant angular velocity (CAV) [constant rotational speed] manner [Fig. 6B and col. 8, line 53 to col. 9, line 20].

8. The aforementioned claim 5, recites the following steps, inter alia, disclosed in Suga:

the data storage area comprises two data segments, and the carrier player controls rotation of the optical storage carrier in a constant linear velocity (CLV) manner when the access device writing data onto one data segment, and each data segment having a different linear velocity [Fig. 6A and 6B and col. 8, line 53 to col. 9, line 20 and col. 1, lines 36-63].

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9. Claim 7 is are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuroda as applied to claims 1-2 above, and further in view of Ikeda et al., US. patent 6,067,284 (hereafter Ikeda).

As to claim 7, Kuroda discloses all of the above elements, including a multiple power calibration locations at a constant rotational speed, including location of 114, which is close to outer edge. Kuroda does not specifically discloses that the location is last possible lead-out area to the extent claimed.

However, locating PCA in the lead-in is well known as evidenced by the Orange Book standard has been known in the art for a very long time.

Also Ikeda clearly discloses:

the optical storage carrier further comprises a last possible lead-out area located close to the outer edge [fig. 17, area 238] of the optical storage carrier for storing ending information about data written on the optical storage carrier, and the second power calibration area is located within the last possible lead-out area [col. 18, lines 4-26 and Figs. 17 to 18B].

Both Kuroda and Ikeda are interested in improving the laser power calibration method in an optical disk device. Both show different area for power calibration.

One of ordinary skill in the art at the time of invention would have realized that different locations on the disk require different speeds and calibrating power with respect to location will be a good feature to have in the system of Kuroda.

Therefore, it would have been obvious to have also used a lead-out area of power calibration in the system of Kuroda as taught by Ikeda because one would be motivated to calibrate the data which is location specific and thus improve accuracy of recording and hence playback in the system, especially high density recording environment of modern system.

10. Applicant's arguments with respect to claims 1-5 and 7-8 have been considered but are moot in view of the new grounds of rejection.

11. All of the above arts were sent in previous actions.

#### **ALTERNATE REJECTION**

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12. Claims 1-5 and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Chao, et al., US. Patent 6,711,107 (hereafter Chao).

Chao discloses first and second separate power calibration areas figs. 3-4 area 300 and 400. Different starting point for lead-out and second power calibration area [fig. 4] [col. 4, line 66 to col. 5, line 62].

Claims 3-5 limitation of different manner of speed control CAV & CLV [col. 2, line 64 to col. 3, line 12].

Claim 7 limitation is covered by fig. 4.

#### **Contact information**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

  
**GAUTAM R. PATEL**  
**PRIMARY EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2627

April 19, 2006